

Work Execution for Integrated Display and Environmental Awareness System (WeIDEAS)

Completed Technology Project (2016 - 2017)



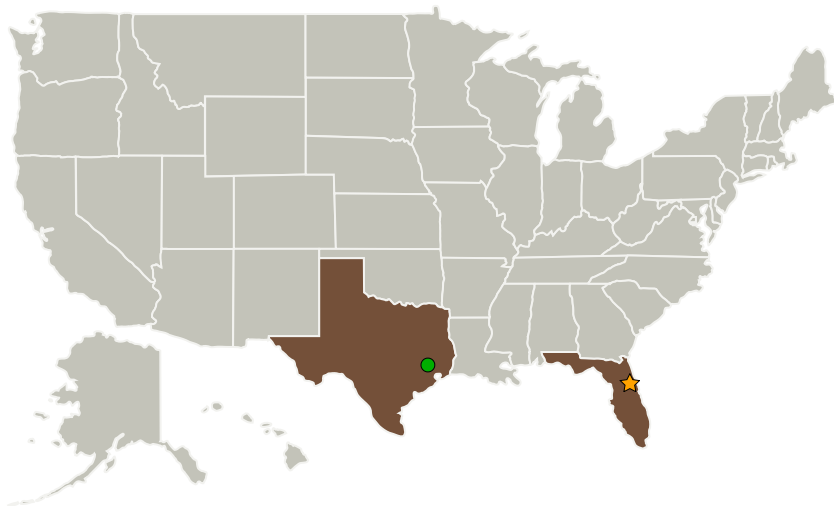
Project Introduction

This is a follow-on to the software portion of the IDEAS project. In this project we are proposing the further development of the procedure (Atlas-Work) component of the IDEAS software suite. The proposed advancement would make the procedure application compatible with ground operations procedures from existing tools, as well as compatibility with the Procedure Representation Language (PRL) developed at Johnson Space Center (JSC). This project delivered the IDEAS Software Suite running on an Android Operating System-compatible Smart Glasses device. Suite would be running the improved Atlas-Work app as described above. This app would, in addition, be able to send relevant telemetry from the procedure to the IDEAS Console application

Anticipated Benefits

Existing procedure software available off-the-shelf has been developed specifically for use on devices such as laptops and tablets. JSC, JPL, and KSC have independently developed procedure software that is compatible with Smart-Glasses wearable devices. This project proposes to take the technology developed and make it compatible. In addition, this proposal will conclude with the first smart-glasses device that is compatible with the systems currently in use by ground operations.

Primary U.S. Work Locations and Key Partners



Technician performs operation following procedure displayed on the IDEAS hardware/software

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Organizations Performing Work	Role	Type	Location
★ Kennedy Space Center(KSC)	Lead Organization	NASA Center	Kennedy Space Center, Florida
● Johnson Space Center(JSC)	Supporting Organization	NASA Center	Houston, Texas

Primary U.S. Work Locations

Florida	Texas
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Images



Project Image

Technician performs operation following procedure displayed on the IDEAS hardware/software (<https://techport.nasa.gov/image/35802>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Kennedy Space Center (KSC)

Responsible Program:

Center Innovation Fund: KSC CIF

Project Management

Program Director:

Michael R Lapointe

Program Manager:

Barbara L Brown

Principal Investigator:

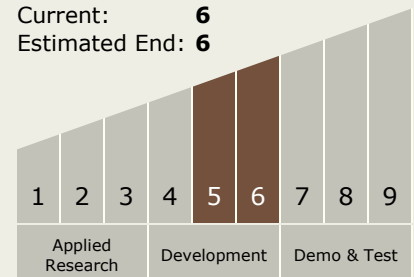
Kelvin R Ruiz

Technology Maturity (TRL)

Start: 5

Current: 6

Estimated End: 6



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Technology Areas

Primary:

- TX11 Software, Modeling, Simulation, and Information Processing
 - └ TX11.1 Software Development, Engineering, and Integrity
 - └ TX11.1.5 Architecture and Design of Software systems

Target Destinations

Earth, The Moon